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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,515	02/27/2002	Richard P. Burnley	X-1081 US	7721

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EXAMINER

LIU, ANDREA

ART UNIT PAPER NUMBER

2825

DATE MAILED: 08/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,515

Applicant(s)

BURNLEY, RICHARD P.

Examiner

Andrea Liu

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13 and 15-34 is/are rejected.
- 7) ☒ Claim(s) 5 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 6-13 and 15-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Pressly et al. U.S. Patent No. 5,889,788.

As to claims 1, 10, 19, 21, 27 and 30-32, Pressly et al. disclose a method for performing a timing analysis for a core device to be embedded in a host integrated circuit, comprising:

obtaining clock-to-output timing information for the core device (column 7);

obtaining clock-to-output timing information and delay timing information for a portion of the host integrated circuit (columns 7 and 21);

associating the clock-to-output timing information, the setup and hold timing information and the delay timing information with respective signals (columns 7 and 21); and

calculating a path time delay for each of the respective signals (figures 6-8; columns 8 and 12).

With respect to claims 2, 11, 20-24, 28 and 29, the Pressly et al. reference teaches a method for performing a timing analysis for a core device to be embedded in a host integrated circuit further comprising determining whether the path time delay for each of the respective signals is less than a clock period (column 19).

Respecting claims 3, 4, 12 and 13, the reference discloses a method of performing timing analysis for a core device to be embedded in a host integrated circuit further comprising modifying the portion of the host integrated circuit in response to the path time delay for at least one of the respective signals being more than the clock period, and determining circuitry values in response to modification of the portion of the host integrated circuit (columns 19-21).

As to claims 6-9, 15-18, 25, 26, 33 and 34, Pressly et al. disclose performing a timing analysis for a core device embedded in a host integrated circuit that further comprises logic and interconnects for coupling the core device to the host integrated circuit (columns 19, 22 and 23), wherein the portion of the host integrated circuit comprises a memory controller coupled to the logic and interconnects (column 6), wherein the core device is a microprocessor, and wherein the host integrated circuit is a field programmable logic device (column 6).

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Allowable Subject Matter

Claims 5 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason is the inclusion of the step of feeding back the circuitry values and modifications of the portion of the host integrated circuit for re-determination of at least one of the setup and hold timing information and the delay timing information for the portion of the host integrated circuit, in a method for performing a timing analysis for a core device to be embedded in a host integrated circuit.

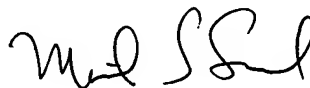
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea Liu whose telephone number is (703) 305-4041.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (703) 308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Andrea Liu

Patent Examiner



MATTHEW SMITH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800